

C. All Incumbent Licensees And All New Service Licensees Should Be Subject To The Same Period For Voluntary Negotiations

1. "Transition Period" Includes Both Voluntary Negotiation Period And Mandatory Relocation Period

At paragraph 27 of the Third NPRM, the Commission requests comment on the length of the "transition period;" whether different "transition periods" should be adopted for different areas (e.g., urban versus rural) or due to technical considerations (e.g., length of links); and whether no transition period would be appropriate in some instances (e.g., in the case of unlicensed devices or services covered by blanket licenses). As UTC explained in its comments, the Commission has confused the issues in this docket by calling the voluntary negotiation period a "transition period."

2. Commenters Support Sufficiently Lengthy Voluntary Negotiation To Allow Market Forces To Be Effective

A majority of the commenters agree with UTC that the goal of voluntary negotiations is to let the marketplace resolve relocation issues, but to have a mandatory relocation program in place as a "safety net" to handle any situations where the incumbent refuses to deal in good faith. However, as EEI notes, in order to allow market

forces to be effective a sufficiently lengthy voluntary negotiation period must be adopted.^{39/}

A few emerging technology proponents argue in opposition to a voluntary negotiation period, alleging that such a period would provide no discernable benefits. For example, Cox Enterprises, Inc. (Cox) argues that in light of the strong protections the FCC has already fashioned for incumbent microwave users, it is unclear what public purpose would be served by maintaining a mandatory voluntary negotiation period.^{40/}

UTC considers Cox's argument to be unconvincing and inconsistent with the Commission's stated objective of relying on market forces. Further, as UTC noted in its comments, there are a number of public benefits served by delaying the availability of mandatory relocation procedures: (1) the Commission will encourage the parties to resolve differences voluntarily; (2) it will stimulate the development of spectrum-sharing techniques; (3) it will minimize the need for the Commission to intervene in what could be up to 29,000 relocation decisions; and (4) it will allow the marketplace to establish fair compensation and

^{39/} EEI, p. 3.

^{40/} Cox, pp. 5-6.

reasonable relocation arrangements, which could serve as a body of experience to be applied in contested cases.

3. The FCC Should Adopt A "Sliding" Period Of Negotiations

UTC's comments recommended adoption of a "sliding negotiating period" of at least five (5) years, commencing with the date each new service license is granted in any particular area. That is, during the first five years of each new service license, the new service licensee would be permitted to negotiate with incumbent microwave licensees potentially affected by its system. Five years after license grant, the new service licensee could enter a voluntary agreement with incumbent microwave licensees or could invoke the mandatory relocation procedures. A large number of commenters support this approach as a more rational approach than adoption of fixed negotiation period that is triggered by the adoption of final rules in this proceeding.^{41/}

^{41/} AAR, (10-year sliding period) pp. 15-17; API, 8-10; APPA, pp. 3-4; Central and Southwest (CSW), pp. 6-8; Commonwealth Edison Company (CECO) pp. 6-8; EEI, pp. 3-4; GTE, p. 3-4; Lower Colorado River Authority (LCRA), (10-year sliding period) pp. 15-17; Metropolitan, pp. 6-7; Montana Power, pp. 7-9; NRECA, (8-year fixed period combined with 3-year sliding period) p. 8 ; Niagara Mohawk Power, pp. 6-8; NYNEX, p. 7; Southwestern Bell, (10-year sliding period) pp. 7-8; Telephone and Data Systems, Inc., (10-year sliding period) p. 3.

As GTE explains, a sliding voluntary negotiating period is necessary for meaningful negotiations since negotiations can only occur after: (1) the FCC allocates spectrum to a particular service; (2) the FCC identifies by licensing or otherwise who is to use particular spectrum; (3) the new user determines that it needs the spectrum in question for its operations and cannot share on a non-interfering basis; (4) the FCC has identified and provided technical rules to accommodate relocation to higher bands; and (5) equipment for higher bands is available.^{42/}

Further, as UTC pointed out, by delaying the mandatory relocation procedures until after the first five years of each license term, all incumbent microwave users will have a reasonable period to discuss relocation before being subjected to a mandatory relocation program. It must be remembered that the Commission has not yet commenced any proceedings concerning new service allocations for a significant portion of the 2 GHz "spectrum reserve" created in this proceeding; i.e., the 2110-2150 MHz and 2160-2200 MHz bands. Likewise, a "sliding period" will ensure that all new service licensees are subject to the same obligation to attempt voluntary negotiations before invoking the Commission's procedures.

^{42/} GTE, p. 3-4.

Ameritech recommends a short negotiation period in order to avoid interference to "high power" PCS providers.^{43/} UTC opposes this suggestion. As discussed above, a sufficiently lengthy negotiation period of at least 5 years for all incumbents is necessary and will serve the public interest. Further, in light of the recent health concerns over portable cellular devices, the Commission should be particularly diligent in testing the RF hazards of any emerging technologies that would operate at a power level similar to cellular in the 2 GHz band.^{44/} Thus, a sliding period of time rather than a fixed date is more appropriate since a thorough examination of RF impacts could significantly delay the introduction of emerging technologies.

American Personal Communications (APC) suggests that the Commission should adopt a three-year negotiation period

^{43/} Ameritech, p. 2.

^{44/} According to the Washington Post, Stephen Clery, professor of physics and biophysics at the Medical College of Virginia, believes there may be a "potential relation" between exposure to electromagnetic fields emitted by cellular phones and cancer. Scientists Urge More Cellular Phone Studies, Washington Post, February 3, 1993. According to the article, the professor's conclusions are based on tests conducted at "radio frequencies found in industrial equipment and microwave ovens." Under Part 18 these devices typically operate in the 2400 MHz band which is in relatively close proximity to the 2 GHz band.

commencing on the date that the First R&O was adopted.^{45/} APC claims that a short negotiation period is necessary in order to ensure that PCS licensees have immediate access to emerging technology spectrum, and that currently there is insufficient "clear" spectrum in many of the major urban areas to support a viable PCS system.^{46/} APC also maintains that other countries have not been so lenient in their accommodation of incumbent microwave users. APC states that other countries, such as England and Japan, are forcing 2 GHz users to clear the band immediately.^{47/}

UTC strenuously objects to APC's suggestion regarding the timing of the voluntary negotiation period. APC's proposal would transform the "negotiation period" into nothing more than a hollow gesture since it is doubtful that few if any emerging technology systems (PCS or otherwise) would be licensed and in a position to negotiate within this short time frame.^{48/} Further, UTC is confused by APC's claims regarding a lack of available spectrum in the major urban markets. In July 1991, APC filed its

^{45/} APC, p. 7.

^{46/} APC, p. 4.

^{47/} APC, pp. 2.

^{48/} In fact, under APC's proposal six months (a sixth of the total time suggested for voluntary negotiations) has already lapsed as of the date of these reply comments.

Frequency Agile Sharing Technology Report on Spectrum Sharing (FAST Report) in which APC claimed that it has identified between 50 MHz and 100 MHz of vacant (emphasis in the original) spectrum in the 1850-1990 MHz band in 96.3 percent of locations in the largest U.S. cities and between 100 MHz and 140 MHz of vacant (emphasis in the original) spectrum in that band for 72 percent of the locations in those cities.^{49/} APC has touted this FAST Report as evidence of the ability to implement PCS on a shared basis with incumbent microwave users throughout this proceeding, in the related PCS proceeding (Docket No. 90-314), and in testimony before the Senate Subcommittee on Communications.^{50/} Yet, now that the FCC has agreed to reallocate the 2 GHz band on a shared basis, APC cries foul because sharing is not possible under the Commission's proposals.^{51/}

^{49/} FAST Report, pp. 22.

^{50/} Testimony of Wayne Schelle, President of APC, before Senate Subcommittee on Communications of the Committee on Commerce, Science and Transportation, June 3, 1992.

^{51/} If indeed APC is not able to share spectrum with existing microwave users, the Commission should reconsider its tentative grant of a pioneer's preference to APC, since the primary justification for the tentative grant was APC's asserted ability to share the spectrum with incumbent microwave users.

Finally, UTC wishes to clarify that APC has distorted the record regarding the treatment of incumbents in the 2 GHz band in other nations. While it is true that most European countries and especially the United Kingdom (U.K.), have not been overly concerned with a clearing of their fixed operations from the 2 GHz band, it is important to note that microwave use of the 1700-2300 MHz band is nowhere near as prevalent in Europe as in the U.S. For example, in the U.K., the 1700-1900 MHz band is used by British Telecom (BT) for only about 100 point-to-point hops, with some 90 line-of-sight links in the North Sea. The 1900-2300 MHz band is used by BT for about 187 links in its trunk network, and is used by BT for a few TV broadcast distribution services and a number of tropospheric scatter links to North Sea platforms.^{52/} Further, concern that Japan is progressing at a faster pace in clearing the 2 GHz band is unwarranted. According to Japan's Minister of Posts and Telecommunications, fixed service will remain in all but a small portion of the 1885-2025 MHz band until the year 2010.^{53/}

^{52/} Report of the Civil Spectrum Review Committee, Stage 1: 470-3400 MHz, presented to the Secretary of State for Trade and Industry (U.K.), at Sections 2.1.3 & 2.1.4.

^{53/} Yoshihiro Ishida, Ministry of Posts and Telecommunications, Future Direction and Deregulation of Spectrum Management in Japan, in Spectrum 20/20 1992 Proceedings, p. 2.2.5 (Radio Advisory Board of Canada and Department of Communications, 1992).

4. Estimated Time to Relocate

The so-called "transition period" is not the period during which all microwave systems will be expected to relocate: it is simply the period during which new service licensees will be permitted to negotiate for microwave relocation. Thus, if voluntary agreement can be reached during this period, it will be up to the parties to determine how long it will take to physically complete the cut-over to new facilities.

The commenters generally support UTC's assessment that a reasonable estimate of the time required to complete a single microwave station relocation is 15 months. Thus, Cox's recommendation that emerging technology service providers should be allowed to require incumbent microwave operators to relocate within twelve months of the time of request should be rejected as unworkable.^{54/} Further, the UTC estimate is fairly conservative, since it assumes that the new microwave facilities will not require any major changes in the antenna structure, or any new transmitter sites. As UTC indicated, if a new site must be secured, together with all zoning, environmental and FAA approvals, the time could easily increase by 6-12 months, if not more.

^{54/} Cox, p. 6.

Finally, UTC agrees with API that the entire process will take considerably longer if the specific spectrum needs of the new technology licensees require the relocation of individual links within a multi-link system.^{55/}

5. All Incumbent Microwave Users Need Same Voluntary Relocation Period

Several commenters echo UTC's opposition to the adoption of different voluntary negotiation periods for rural and urban areas. For example, GTE argues that since requests to negotiate will come as demand for new services warrant deployment there is no need for different rules for different areas of the country. Further, GTE notes that until new services are identified and defined and their technical rules established, it is difficult to know what areas will have the earlier demand or what technical factors will be present.^{56/} Similarly, AAR urges the FCC not to make arbitrary distinctions about the transition period based on how it thinks the PCS market will develop.^{57/} This argument is especially compelling given the fact that PCS will only occupy a portion of the total spectrum to be reallocated. Thus, it would be arbitrary for the Commission to commence a "transition period" until

^{55/} API, pp. 5-6.

^{56/} GTE, p. 6.

^{57/} AAR, p. 16.

it knows when and where new service licensees will require microwave spectrum so that all incumbents have the same opportunity, and all new service licensees have the same obligation, to negotiate for relocation rights.

On the other hand, if the "transition period" is keyed to the date each new service licensee is authorized, it would be unnecessary to consider whether different transition periods should be adopted for rural or urban areas. Thus, a "sliding" period for voluntary negotiations would most closely approximate the true needs of all new service licensees as well as all incumbent users.

Both APC and LOCATE argue that there should be a shorter voluntary negotiation period for major urban areas where there is little or no available spectrum for the immediate implementation of emerging technologies.^{58/} UTC is adamantly opposed to this suggestion. Because new technologies have not been identified, and because even among PCS proponents there are significant differences in their spectrum-sharing capabilities, it is impossible to predict whether any given area will have "little or no spectrum available." If a new service licensee is permitted to foreshorten the negotiation period by claiming there is

^{58/} APC, p. 7; and LOCATE, p. 15.

"little or no spectrum available," there will be no incentive for new service licensees to use spectrum-sharing techniques. In fact, this proposal would eviscerate the transition rules adopted in the First R&O because the whole premise behind this docket is that new service licensees should negotiate with incumbents if they cannot find vacant spectrum on which to operate. If a new service licensee can merely state that it cannot locate spectrum, and thereby invoke the mandatory relocation procedures, there is no incentive for the licensee to negotiate with the incumbents.

Further, as CECO notes this proposal fails to consider that it will be even more difficult for incumbent licensees in congested areas to find adequate replacement spectrum, since the higher microwave bands in these areas often have a corresponding level of congestion.^{59/} NYNEX also lists a number of factors that would delay microwave relocations in areas of spectrum congestion, such as urban areas; e.g., the need for multiple paths and the increased cost of site acquisitions.^{60/}

^{59/} CECO, pp. 6-7.

^{60/} NYNEX, p. 5.

6. Unlicensed PCS-Spectrum Should Have The Same Transition Period As Other Portions Of The 2 GHz Band

Numerous commenters support UTC's position that the transition framework adopted in the First R&O should be applied to all segments of the 2 GHz band equally, including those identified for the development of unlicensed devices, and the obligation to negotiate in good faith should apply equally to all new users of the 2 GHz band. Southwestern Bell for example, argues that given the need for clear spectrum to operate unlicensed PCS on an interference-free basis, it is even more important to have a transition period to work out an effective wholesale relocation procedure.^{61/}

Uniform application of the same transition period throughout all bands is also required in order to ensure the operational integrity of incumbent microwave systems that straddle "licensed" and "unlicensed" emerging technology spectrum. Thus, if a microwave station in the proposed unlicensed 1910-1930 MHz band is one end of a paired system, with the other end licensed in another part of the 2 GHz band, the entities doing the relocating must protect the integrity of that entire system, not just its component parts. The existence of a uniform transition

^{61/} Southwestern Bell, pp. 9-10.

period will ensure that all of the impacted parties -- unlicensed service providers, licensed service providers and incumbent microwave users -- work out a satisfactory arrangement.

Accordingly, UTC opposes ROLM's recommendation that 2 GHz spectrum designated for unlicensed PCS be limited to a transition period of one year.^{62/} As has been indicated, from a purely logistical view it takes well over a year just to move single microwave station, and would take much longer to effectively migrate all of the existing users in the band en masse. Moreover, under the ROLM plan unlicensed PCS would be able to begin operating one year after commencement of the transition period, yet under the transition rules of the First R&O incumbents are allowed to relocate back to their former 2 GHz frequencies if within one year of relocation the replacement facilities are found to be deficient. Such a relocation is not possible if there are unlicensed devices operating throughout the band.

It should also be noted that ROLM's reliance on API's support of a one-year transition plan for unlicensed spectrum is misplaced.^{63/} In its Reply Comments in Docket

^{62/} ROLM, p. 3.

^{63/} ROLM, p. 3.

No. 90-314, API clarified that it supported a plan whereby licensees in the 1910-1930 MHz band should be given eighteen (18) months to notify the FCC that they intended to relocate and to request reimbursement from an escrow fund. API further clarified that it did not anticipate that the relicensing and construction of the new facilities would be accomplished within the eighteen month period, but instead that this would be the cut-off for requesting reimbursement.^{64/}

While UTC appreciates API's efforts to reach an accommodation that will ensure payment of relocation expenses, UTC submits that under the Commission's First R&O all existing 2 GHz microwave licensees must be fully compensated for any relocation. The fundamental issue regarding unlicensed spectrum is determining who will pay the cost of microwave relocation. Until this issue is resolved it is premature to discuss any mandatory date by which microwave licensees should vacate the 1910-1930 MHz band.

Under UTC's "sliding" transition plan, the 5-year negotiation period could be set to commence with the adoption of technical rules for the type acceptance of

^{64/} API Reply Comments in GEN. Docket No. 90-314, filed January 8, 1993.

unlicensed devices designed to operate in this band. During this so-called "transition period," equipment manufacturers, prospective users, or a consortium of entities, could negotiate with incumbent microwave licensees for relocation from the band. Any non-exempt microwave systems remaining in the band after five years would be subject to the mandatory relocation procedures adopted in the First R&O.

Finally, UTC questions the viability, and wisdom, of Apple's "frequency optimization plan" under which incumbent 2 GHz microwave users in the 1910-1930 MHz band relocated to another portion of the 2 GHz band.^{65/} UTC suspects that most private microwave systems operating in the unpaired 1910-1930 MHz band were coordinated in this part of the band as a "last resort," and that relocating to other portions of the 2 GHz band may be impossible. Further, as APC notes, even where it is possible, it makes little sense to relocate a microwave system into another part of the band as this might require further relocation by a new service licensee authorized to use the same spectrum.^{66/}

^{65/} Apple, p. 7.

^{66/} APC, pp. 8-9.

7. If "Fixed" Transition Period Adopted There Must Also Be A Period For Each Microwave User To Discuss Voluntary Relocation

Although UTC strongly believes a "sliding" transition period would be the most rational way of treating all licensees uniformly and fairly, if a "fixed" transition period is adopted UTC reiterates that there must also be a period of time for each microwave user to discuss voluntary relocation. As discussed in UTC's comments and above, a fixed transition period could expire long before a new service licensee enters the area, so there must be a separate period for voluntary negotiations.^{67/} Also, by allowing a period for voluntary negotiations, the Commission will minimize its own burden by encouraging parties to negotiate before invoking mandatory relocation procedures.

In addition, it must be remembered that incumbent private microwave users are, by and large, not in the communications "business" and will probably be unprepared to begin discussing relocations immediately upon receipt of

^{67/} In allocating spectrum for the Direct Broadcast Satellite (DBS) Service, for example, the transition period expired before any DBS services were implemented; in fact, DBS has never materialized, despite the fact that all microwave systems in the band were relegated to secondary status over 5 years ago.

a request for relocation.^{68/} Therefore, UTC urges that, if a "fixed" transition period is adopted, a new service licensee should be prohibited from invoking mandatory relocation procedures unless it is able to demonstrate bona fide efforts at negotiation continuing over at least a one year period.^{69/}

D. Tax Certificates Should Be Used As An Incentive For Voluntary Settlements

UTC agrees with commenters such as US West and Telocator that the awarding of tax certificates to displaced microwave users would support the Commission's policy and statutory mandate to encourage new technologies, and is therefore an appropriate exercise of the FCC's authority.^{70/}

Further, UTC reiterates its suggestion that the FCC use tax certificates as a regulatory incentive for parties to reach voluntary settlements on relocation issues. Under this approach, a tax certificate should be granted to any

^{68/} For example, Southern notes that it is not staffed to deal with a large volume of requests to relocate at the same time, p. 3.

^{69/} This one year time period could be set to commence when a new service licensee presents the incumbent with a detailed relocation plan, together with evidence of financial capability, or when the incumbent responds to a new service licensee with its own relocation plan.

^{70/} US West, p. 3; and Telocator, p. 16.

incumbent licensee who voluntarily agrees to relocation. If, on the other hand, the Commission is forced to modify the incumbent's license over the incumbent's objections, and, if the Commission finds that the incumbent's objections were patently without merit, the tax certificate could be withheld. In this manner, tax certificates could be used as an incentive for incumbents to voluntarily relocate, and as a disincentive for incumbents to raise patently frivolous objections.

**IV. UTC'S RECOMMENDED TRANSITION PROCEDURES WILL
SERVE ALL PARTIES EQUITABLY**

In view of the foregoing, UTC renews its recommendation of the following procedures to implement the mandatory relocation program adopted in the First R&O:

1. The mandatory relocation procedures outlined in Section 94.59(b) will become available to any new service licensee five (5) years after the grant of its license to operate in a given service area.
2. Once the mandatory relocation procedures become available to a new service licensee in a given area, the procedures are invoked by the new service licensee serving the incumbent licensee with a written request for relocation. The written request should provide for one or both parties to prepare detailed relocation proposals, and should identify a reasonable timeframe for the exchange of relocation proposals, including evidence of the new service licensee's financial ability to execute the relocation.

3. If, after twelve months of negotiations (but no more than eighteen months after the commencement of negotiations), the parties are unable to reach agreement on the proposed relocation, either party may serve the other party with a Request for Mediation pursuant to the Commercial Mediation Rules of the American Arbitration Association. (Nothing precludes the parties from voluntarily agreeing to submit issues to mediation at any time earlier in the negotiations, or from voluntarily agreeing to other dispute resolution procedures, such as commercial arbitration.)
4. If the parties are unable to reach agreement on all remaining issues within six months after the designation of a mediator, the new service licensee may petition the FCC for involuntary modification of the incumbent's license. The FCC will afford the incumbent an opportunity to file comments in opposition to the relocation and to present any evidence as to why the relocation proposal does not meet the conditions of Section 94.59(b) or would otherwise be inconsistent with the public interest.
5. If the Commission orders involuntary modification of the incumbent's license, it shall condition the effectiveness of the order on the new service licensee establishing a bond or escrow account to guarantee completion of the authorized modification and the payment of any reasonable incremental increases in operating expenses that will fall upon the incumbent licensee due to the modification.^{21/}

^{21/} The Commission adopted a similar requirement to establish a bond or escrow account in its ITFS/MMDS relocation rules, Second Report and Order, in GEN. Docket No. 90-54, 6 FCC Rcd 6792 (1991).

V. CONCLUSION

UTC continues to believe that the optimum method of expediting the introduction of emerging telecommunications services, while at the same time fulfilling the FCC's commitment to protect the operational and financial integrity of the incumbent 2 GHz microwave users, is to rely on market forces. The FCC's goal should be to let the marketplace resolve relocation issues, but to have a mandatory relocation program in place as a "safety net" to handle any situations where the incumbent users refuse to deal in good faith.

Accordingly, the FCC should not attempt to define "comparable alternative facilities" by reference to any single, inflexible standard. Rather, the FCC should create a process that permits and encourages parties to negotiate privately and to identify the factors that each incumbent considers important to an assessment of "comparability."

In order for such an approach to be effective, a sufficiently lengthy period of voluntary negotiations between new telecommunications service providers and existing 2 GHz microwave licensees is necessary to allow market forces to work. Contrary to the assertions of some new service proponents, the adoption of a lengthy negotiation period will serve the public interest by: (1)

encouraging the parties to resolve differences voluntarily; (2) stimulating the development of spectrum-sharing techniques; (3) minimizing the need for the FCC to intervene in what could be up to 29,000 relocation decisions; and (4) allowing the market-place to establish fair compensation and reasonable relocation arrangements, which could serve as a body of experience to be applied in contested cases.

The most effective and rationale method to promote the use of voluntary negotiations between incumbents and new service providers is through the adoption of a "sliding period" of negotiations, of at least five (5) years, commencing with the date each new service license is granted in any particular area. Adoption of a 5-year sliding negotiation period would ensure equal treatment of all segments of the 2 GHz band (including unlicensed bands), and that the obligation to negotiate in good faith would apply equally to all new users of the 2 GHz band.

UTC is adamantly opposed to the adoption of a shorter transition period for those locations where there is little or no available spectrum. If a new service licensee is permitted to foreshorten the negotiation period by claiming "lack of spectrum," there will be no incentive for new

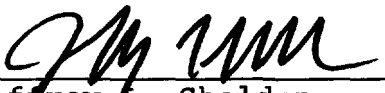
service licensees to use spectrum-sharing techniques or to negotiate.

Finally, in the few situations where voluntary negotiations fail to achieve a satisfactory result and mandatory relocation procedures must be invoked, UTC recommends the use of mediation as a first step in resolving points of disagreement.

WHEREFORE, THE PREMISES CONSIDERED, the Utilities Telecommunications Council respectfully requests the Federal Communications Commission to take action consistent with the views expressed herein.

Respectfully submitted,

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February 12, 1993

CERTIFICATE OF SERVICE

I, Nancy Thompson, a secretary with the Utilities Telecommunications Council, hereby certify that a copy of the foregoing reply comments was hand delivered, this 12th day of February, 1993, to each of the following:

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